ABSTRACT

A microcantilever sensor using molecular imprinting polymerization (MIP) technology, and a method of using thereof. The MIP microcantilever sensor is placed into a conduit, where it processes either an aqueous or environmental flow, or else a bodily fluid. The MIP microcantilever sensor provides for continuous on-line monitoring of the flow whereby the sensor monitors for any target analyte in which the MIP has been fabricated to attract. The present invention can be used to detect organic molecules, inorganic molecules, inorganic ions or viruses, pathogens, microorganisms, parasites or any other biological substance in which detection is desired. When the MIP microcantilever sensor detects the target analyte, the microcantilever sends a signal to a microprocessor for. In an alternate embodiment, a sensor array may be disposed in the conduit including a plurality of microcantilevers